



## Gulf of Mexico Harmful Algal Bloom Bulletin

20 February 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: February 15, 2007

### Conditions Report

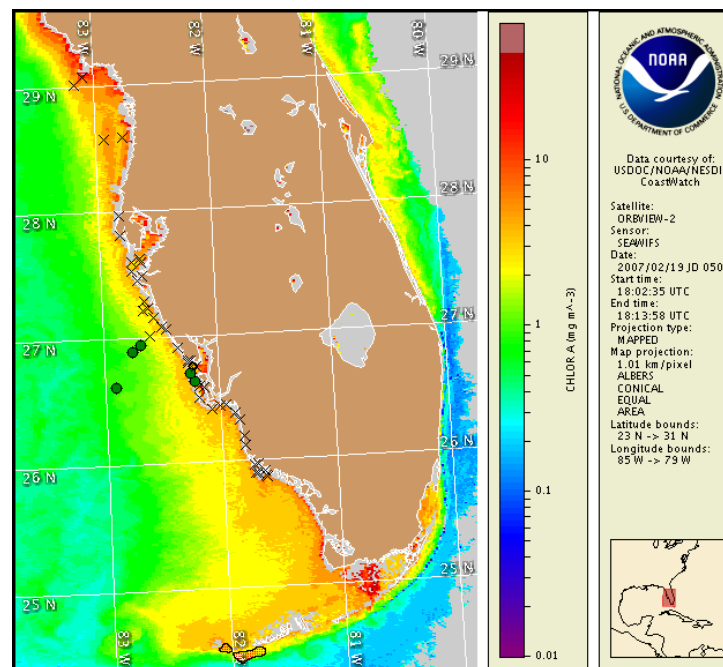
A harmful algal bloom has been identified in patches from southern Charlotte to northern Lee County, and the Lower Keys in Monroe County. Patchy very low impacts are possible for bayside regions of northern Lee County through Thursday. Patchy very low impacts are possible today for the ocean side of the Lower Keys. No other impacts are expected through Thursday.

### Analysis

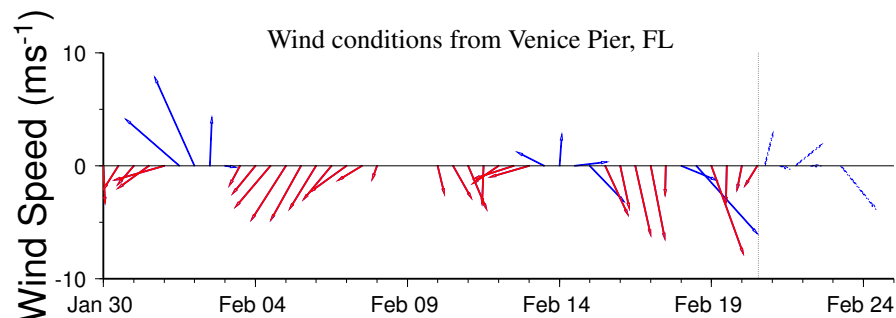
The harmful algal bloom continues to dissipate along the coast of Southwest Florida. Samples this week confirmed very low concentrations of *Karenia brevis* in Gasparilla Sound at Devilfish Key, with background concentrations at Boca Grande Pass and Pine Island Sound (FWRI, 2/12). Background concentrations of *K. brevis* were detected in samples 16 to 39 miles offshore southwest of Venice (FWRI, 2/10). Satellite imagery does not indicate elevated chlorophyll levels in this area. Slight southerly transport of the bloom is possible this week. No intensification of the bloom is expected through Thursday.

The harmful bloom persists northwest of the Marquesas Keys. Very low concentrations of *K. brevis* were detected 2 to 6 miles south of Stock Island on 2/14 (MML). Satellite imagery indicates elevated chlorophyll levels (3-4  $\mu\text{g/L}$ ) north and west of Key West in the Key West National Wildlife Refuge. A band of elevated chlorophyll is also present in Hawk Channel from southwest of Key West at 24°27.7'N 81°56.7'W to Big Pine Key. Sampling recommended south and west of Marathon in Moser and Hawk Channels. Slight southwesterly transport of the bloom is possible this week north of the Lower Keys, with slight easterly transport south of the Keys. No intensification of the bloom is expected through Thursday.

- Allen, Fisher



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from February 10-15 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: [http://www.csc.noaa.gov/crs/habf/habfs\\_bulletin\\_guide.pdf](http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf)



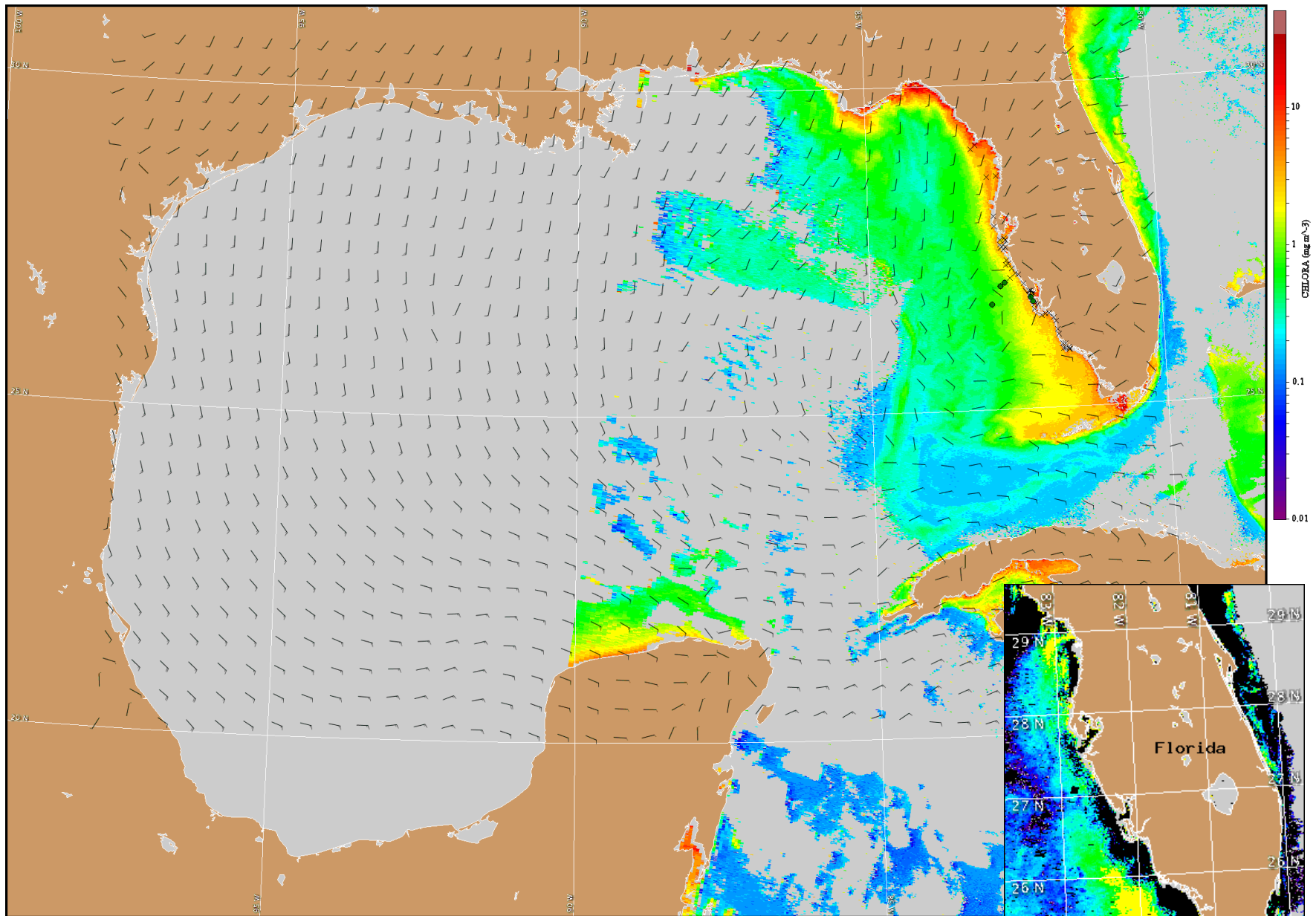
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Southerly winds today at 10 knots (5 m/s) becoming southeasterly by tonight and southwesterly tomorrow. Northwestern winds Wednesday night, with northerly winds Thursday.

FL Keys: East to Southeasterly winds through tonight at 10 knots (5 m/s) becoming variable Wednesday. Northwest winds Wednesday night becoming northerly by Thursday.

Please note the following restrictions on all SeaWiFS imagery derived from CoastWatch.

1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive GeoEye approval via the CoastWatch Program.



Satellite chlorophyll image and forecast winds for February 21, 2007 06Z with cell concentration sampling data from February 10-15 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: [http://www.csc.noaa.gov/crs/habf/habfs\\_bulletin\\_guide.pdf](http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf)

Verified HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

